

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A plasma arc torch comprising:

a torch handle;

a torch head disposed within the torch handle;

a torch lead operable with the torch head;

a solenoid disposed within the torch head and distally from the torch handle and operable with the torch lead and the torch head to control a supply of gas; and

an activation member operable with the solenoid,

wherein the activation member activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head for supply to a plasma arc chamber of the plasma arc torch, and the activation member deactivates the solenoid such that the gas flow is terminated.

2. (Currently Amended) A plasma arc torch comprising:

a torch handle;

a torch head disposed within the torch handle;

a torch lead operable with the torch head;

a solenoid disposed within the torch head and distally from the torch handle and operable with the torch lead and the torch head to control a supply of gas; and

a trigger system operable with the solenoid,

wherein the trigger system activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head for supply to a plasma arc chamber of the plasma arc torch, and the trigger system deactivates the solenoid such that the gas flow is terminated.

3. (Currently Amended) A method of operating a plasma arc torch, the method comprising the steps of:

providing a source of gas;

providing an activation member operable with a solenoid disposed within a torch head distally from a handle of the plasma arc torch; and

operating the activation member such that the solenoid is activated, thereby providing the gas for supply to a plasma arc chamber of the plasma arc torch.

4. Cancelled.

5. (Previously Presented) A plasma arc torch comprising:

a torch handle;

a torch head operatively connected to the torch handle; and

a gas control device disposed within the torch head and distally from the torch handle, the gas control device controlling the supply of gas to a plasma arc chamber of the plasma arc torch,

wherein the gas control device allows gas pressure to build up local to the torch head for supply to the plasma arc chamber.

6. (Currently Amended) A method of operating a plasma arc torch comprising the step of building up gas pressure within a part of a torch head of the plasma arc torch with a device that is disposed within and, distally from a torch handle, for supply to a plasma arc chamber of the plasma arc torch.

7. (Currently Amended) A method of operating a plasma arc torch comprising the step of maintaining an operational gas pressure within a part of a torch head with a device that is disposed within and, distally from a torch handle, for supply to a plasma arc chamber of the plasma arc torch.

8. (Previously Presented) The method according to Claim 6 wherein gas pressure is built up within the torch head to reduce restart times.